

New Insights Into Suicide Prevention and Management

Glen L. Xiong, MD

UC Davis, Department of Psychiatry

Sacramento County Mental Health
Treatment Center

Outline

- Suicide Statistics
- Psychiatric Disorders
- Evidence-Based Treatments
- Cultural Factors in Suicide
- Environmental Risks

Suicide: Definition

... suicide is a Mental Health concern, associated with psychological factors such as the difficulty of coping with depression, inescapable suffering or fear, or other mental disorders and pressures.

(World Health Organization, 2005)

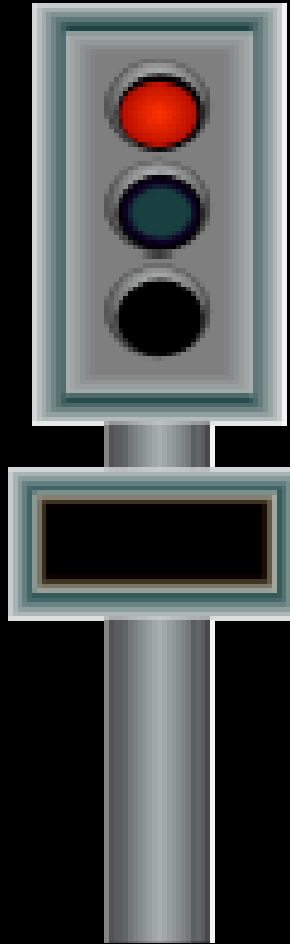
Terminologies

- Suicide Ideation – Thoughts of intentionally taking one's own life
- Suicide Attempt – Actions to injure oneself without resulting in death
- Suicide Behavior – Thoughts or actions which if implemented may result in death

Characteristics of Suicide

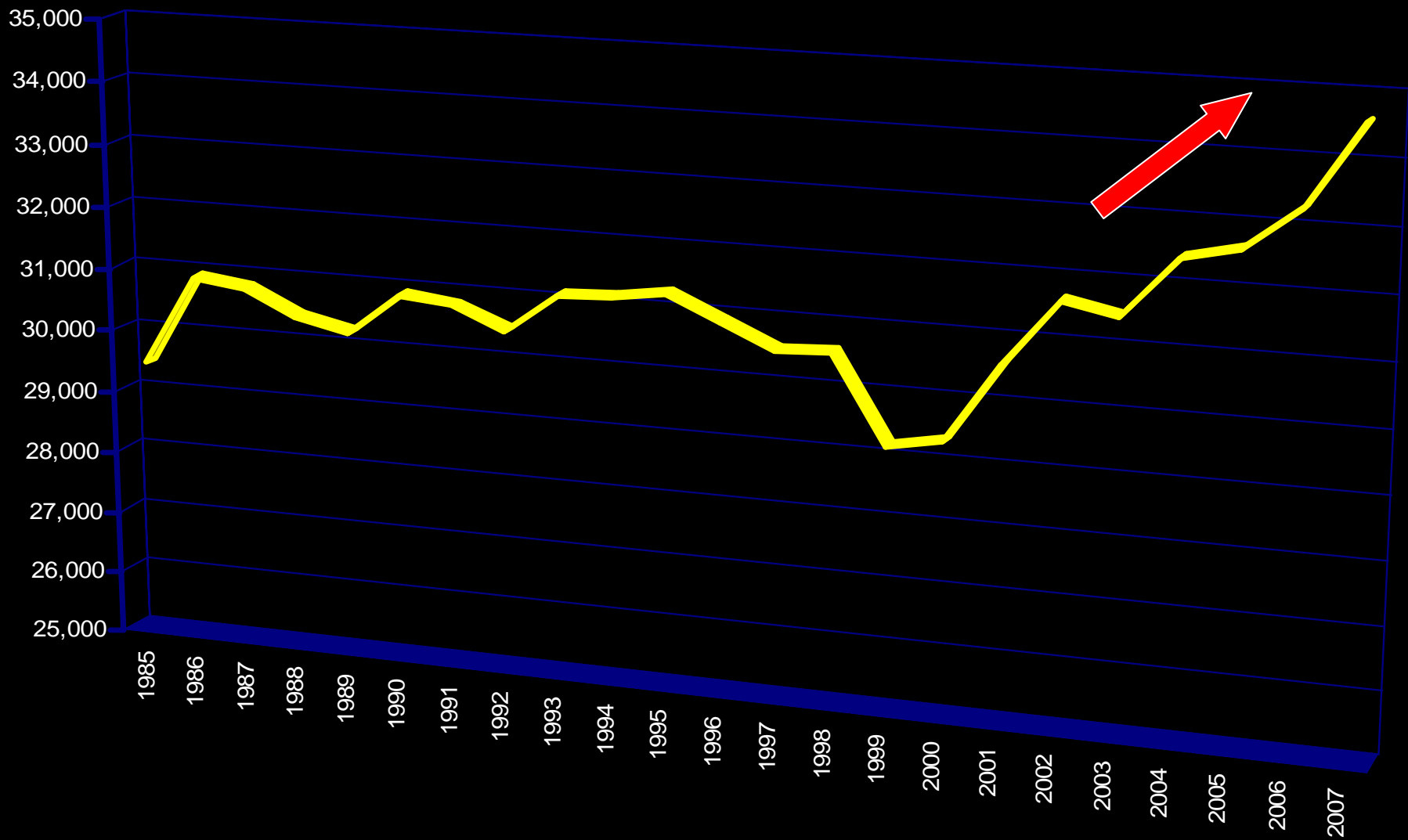
- Suicidal thoughts are irrational
- People who are suicidal are often unaware of the consequences of suicide that are obvious to others
- Suicide behaviors are a form of communication
- For people who are suicidal, normal communication has usually broken down and the suicide attempt may be the person's way of sending a message

Terminology



- Suicide Completion
- Suicide Death

U.S. Suicide (Deaths/Year)



U.S. Suicide (Deaths/100,000)



Suicide Statistic

- About every 15 minutes someone in this country intentionally ends his/her life

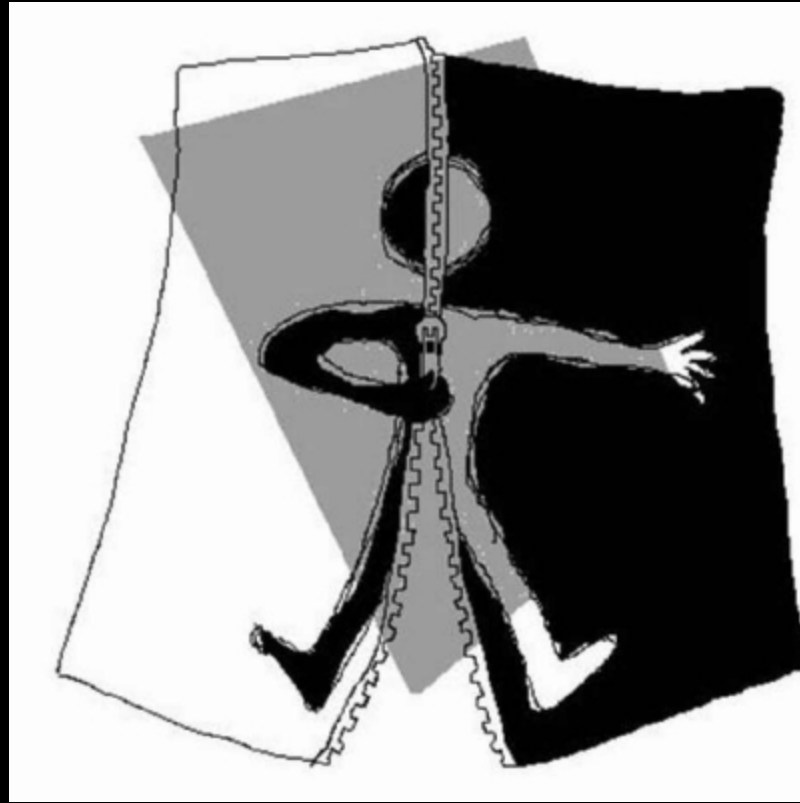


Fact or Fiction

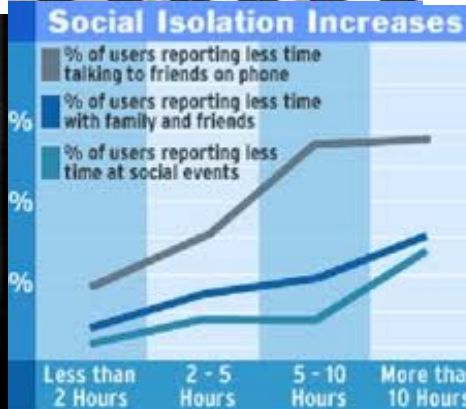


- Suicidal people are fully intent on dying

Suicide & Ambivalence



Suicide Risks



Bio-Psycho-Social Model

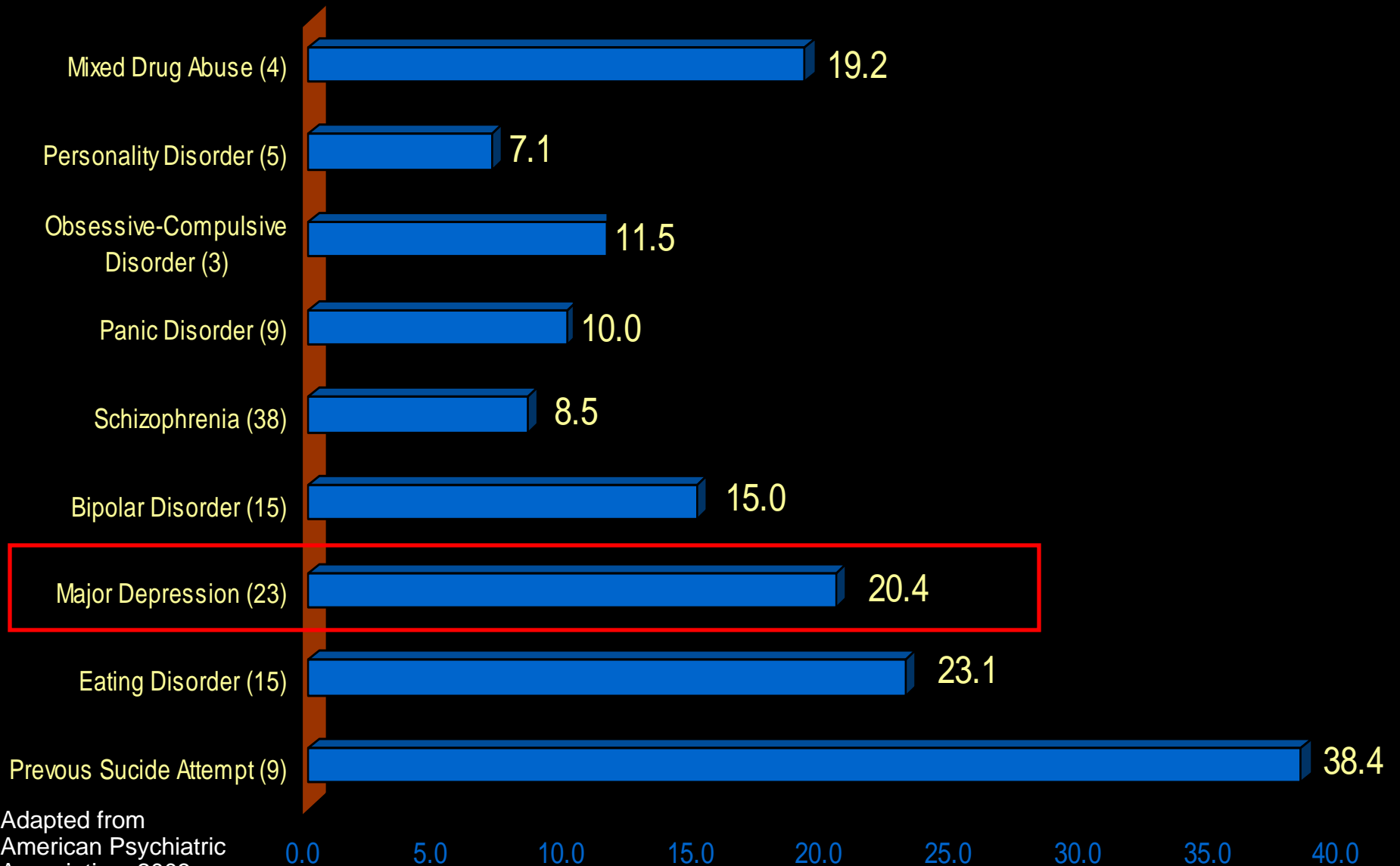
- Biological: Psychiatric Disorders
- Psychological: Emotional, Cognitive, Behavioral
- Social: Cultural, Environmental

Suicide Statistic

- 90% of people who die by suicide are suffering from one or more psychiatric disorders:



Standardized Mortality Ratio



Adapted from
American Psychiatric
Association, 2003.

Office of Applied Studies

The OAS Report

Issue 34

2006

Suicidal Thoughts, Suicide Attempts, Major Depressive Episode, and Substance Use among Adults

Office of Applied Studies, Substance Abuse and Mental Health
Services Administration (SAMHSA)

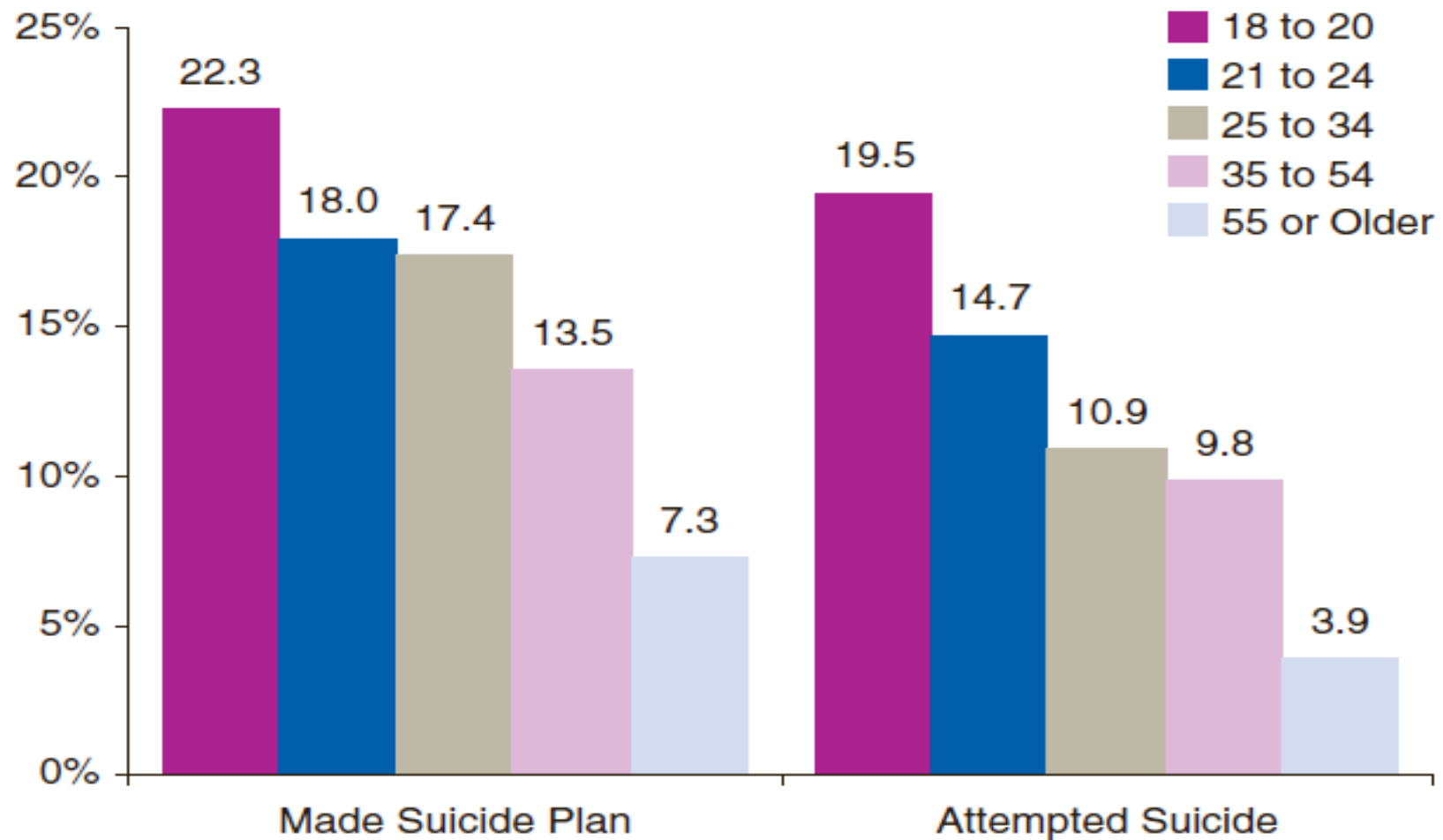
2006 OAS/SAMHSA Report



Among adults aged 18 or older who experienced a past year major depressive episode,

- 56.3 % thought that it would be better if they were dead
- 40.3 % thought about suicide
- 14.5 % made a suicide plan
- 10.4 % made a suicide attempt

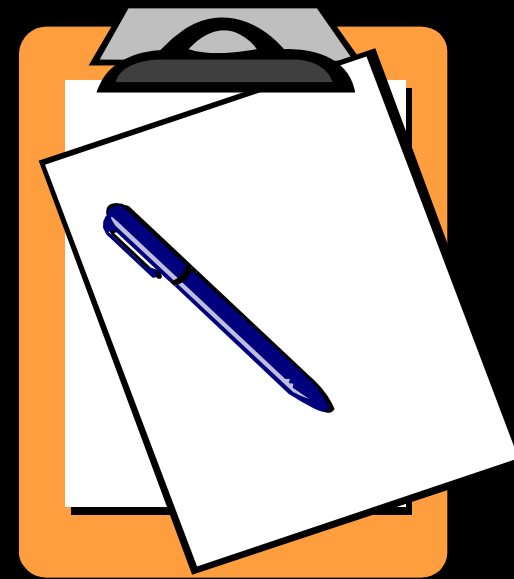
Figure 3. Percentages Reporting Suicide Plans and Attempts among Adults Aged 18 or Older with a Past Year Major Depressive Episode, by Age Group: 2004 and 2005 NSDUHs



Source: SAMHSA, 2004 and 2005 NSDUHs.

Suicide Statistic

Suicide is the 3rd
leading cause of
death ages 15-
24yrs





> Home

Home > Health News

> Quick Guide to Healthy Living

> Personal Health Tools

> Health A-Z

>> Health News

> Find Services and Information

> Popular Requests

> Español



E-cards Send to Friends and Family

Few Suicidal Teens Get the Help They Need

More than 70% don't obtain mental health services, study shows.

- E-mail this article
- Subscribe to news
- Printer friendly version



FRIDAY, Sept. 10 (HealthDay News) -- Although the U.S. Centers for Disease Control and Prevention reports that suicide is the third leading cause of death for people aged 15 to 24 years, a new study shows few suicidal teens are getting the mental health treatment they need.

The researchers found only 13 percent of teenagers with suicidal thoughts visited a mental health professional through their health care network, and only 16 percent received treatment during the year, even though they were eligible for mental health visits without a referral and with relatively low co-payments.

Even when researchers combined various types of mental health services, such as antidepressants and care received outside their health network, only 26 percent of teens contemplating suicide received help in the previous year.

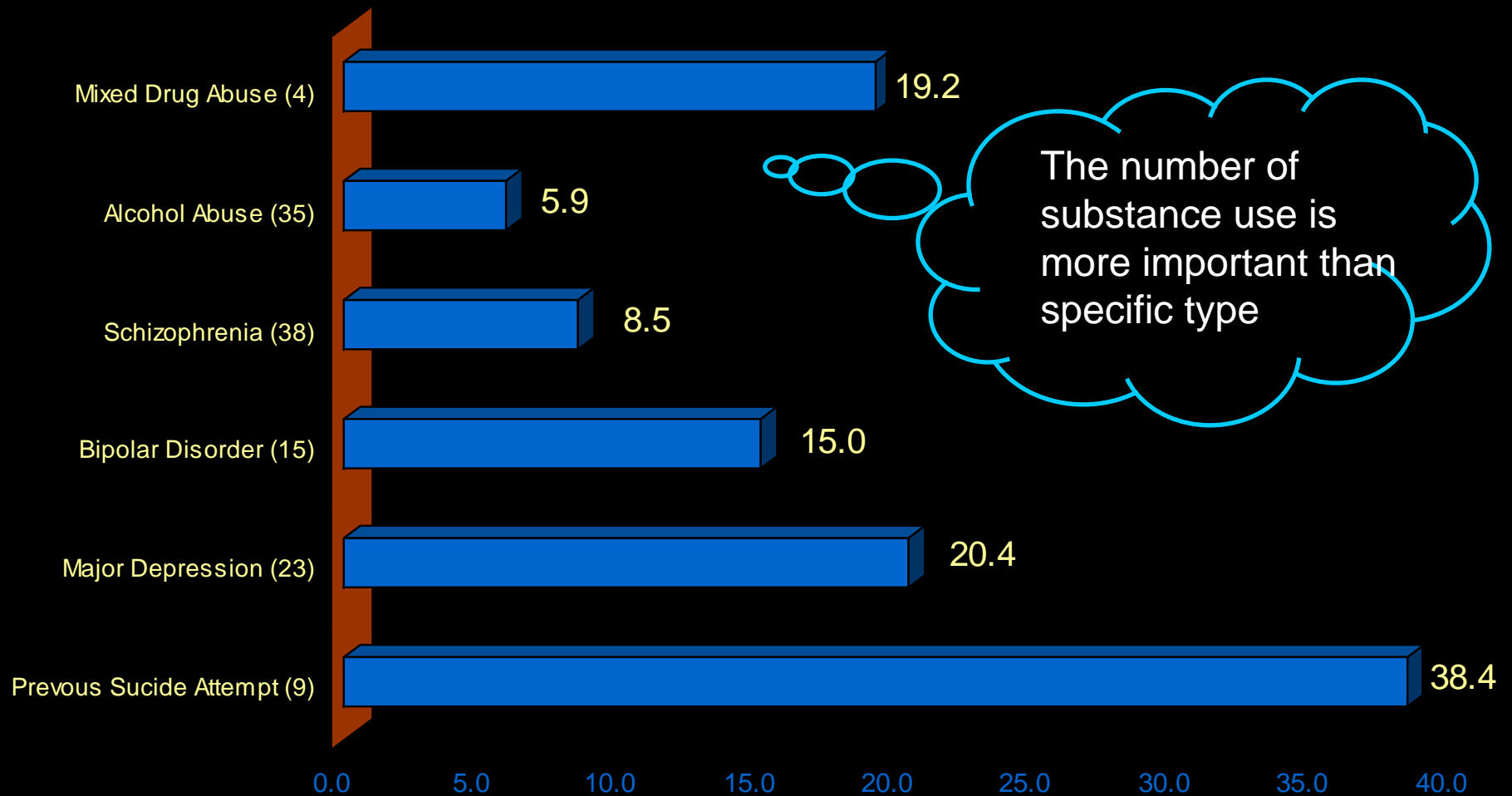
"Teen suicide is a very real issue today in the United States. Until now, we've known very little

Suicide Statistic

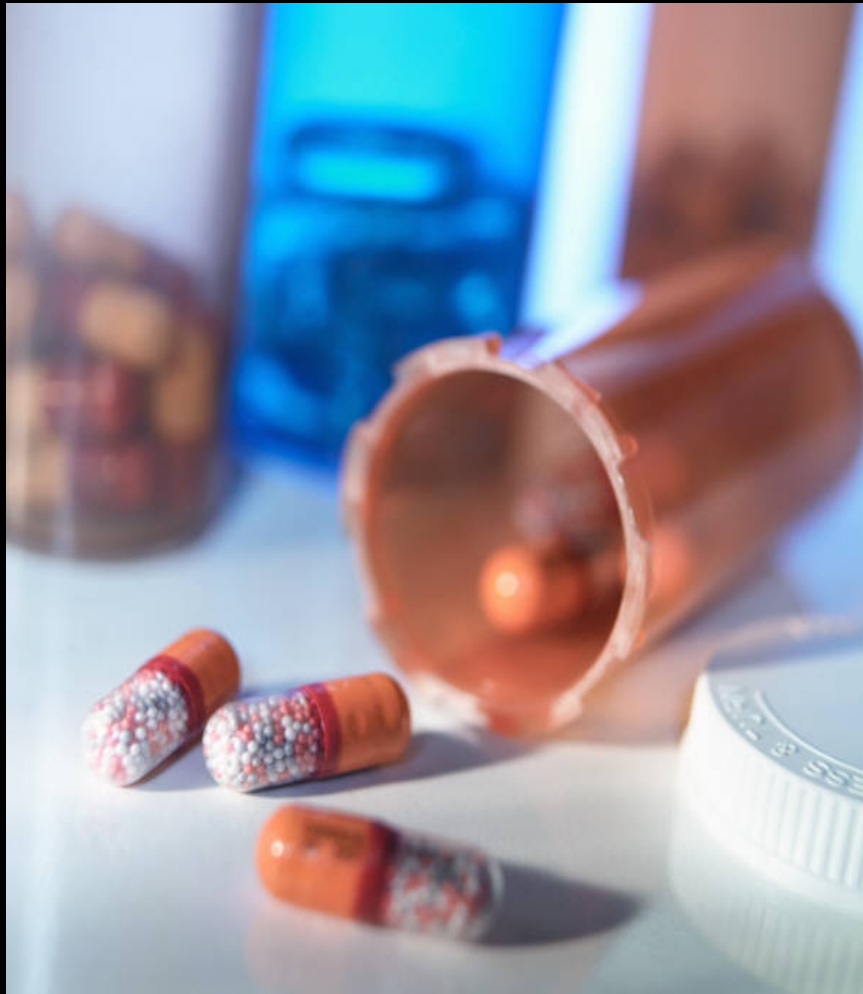


More than 50% of teens who commit suicide have a history of alcohol and drug use

Standardized Mortality Ratio



Adapted from
American Psychiatric
Association, 2003.



Do medications
reduce suicide
deaths?

Medications

- Antidepressants
- Mood stabilizers
- Antipsychotics
- Benzodiazepines

Clozapine Treatment for Suicidality in Schizophrenia

International Suicide Prevention Trial (InterSePT)

Herbert Y. Meltzer, MD; Larry Alphas, MD, PhD; Alan I. Green, MD; A. Carlo Altamura, MD; Ravi Anand, MD; Alberto Bertoldi, MD; Marc Bourgeois, MD; Guy Choutnard, MD; M. Zahur Islam, PhD; John Kane, MD; Ranga Krishnan, MD; J.-P. Lindenmayer, MD; Steven Potkin, MD; for the InterSePT Study Group

Background: Approximately 50% of patients with schizophrenia or schizoaffective disorder attempt suicide, and approximately 10% die of suicide. Study results suggest that clozapine therapy significantly reduces suicidal behavior in these patients.

Methods: A multicenter, randomized, international, 2-year study comparing the risk for suicidal behavior in patients treated with clozapine vs olanzapine was conducted in 980 patients with schizophrenia or schizoaffective disorder, 26.8% of whom were refractory to previous treatment, who were considered at high risk for suicide because of previous suicide attempts or current suicidal ideation. To equalize clinical contact across treatments, all patients were seen weekly for 6 months and then biweekly for 18 months. Subsequent to randomization, unmasked clinicians at each site could make any interventions necessary to prevent the occurrence of suicide attempts. Suicidal behavior was assessed at each visit. Primary end points included suicide attempts (including those that led to death), hospitalizations to prevent suicide, and a rating of "much worsening of suicidality" from baseline. Masked raters, including an independent

suicide monitoring board, determined when end point criteria were achieved.

Results: Suicidal behavior was significantly less in patients treated with clozapine vs olanzapine (hazard ratio, 0.76; 95% confidence interval, 0.58-0.97; $P=.03$). Fewer clozapine-treated patients attempted suicide (34 vs 55; $P=.03$), required hospitalizations (82 vs 107; $P=.05$) or rescue interventions (118 vs 155; $P=.01$) to prevent suicide, or required concomitant treatment with antidepressants (221 vs 258; $P=.01$) or anxiolytics or soporifics (301 vs 331; $P=.03$). Overall, few of these high-risk patients died of suicide during the study (3 clozapine- vs 3 olanzapine-treated patients; $P=.73$).

Conclusions: Clozapine therapy demonstrated superiority to olanzapine therapy in preventing suicide attempts in patients with schizophrenia and schizoaffective disorder at high risk for suicide. Use of clozapine in this population should lead to a significant reduction in suicidal behavior.

Arch Gen Psychiatry. 2003;60:82-91

Suicide Risk in Bipolar Disorder During Treatment With Lithium and Divalproex

Frederick K. Goodwin, MD

Bruce Fireman, MA

Gregory E. Simon, MD

Enid M. Hunkeler, MA

Janelle Lee, MHA, DrPH

Dennis Revicki, PhD

BIPOLAR DISORDER IS A MAJOR public health problem, in any given year affecting approximately 1.3% to 1.5% of the US population.¹ In addition to the personal anguish of affected individuals, bipolar disorder places substantial burdens on the health care, social welfare, and criminal justice systems and on families, caregivers, and employers. In the World Health Organization's Global Burden of Disease study, bipolar disorder ranked sixth among all medical disorders in years of life lost to death or disability.² Suicide and suicide attempts are significant contributors to that premature mortality and disability. Estimates of the lifetime risk of suicide in patients with bipolar disorder range from 8% to 20%, 10 to 20 times that in the US general population.³⁻⁷ In a review of 31 studies includ-

Context Several studies have suggested that lithium treatment reduces risk of suicide in bipolar disorder, but no research has examined suicide risk during treatment with divalproex, the most commonly prescribed mood-stabilizing drug in the United States.

Objective To compare risk of suicide attempt and suicide death during treatment with lithium with that during treatment with divalproex.

Design and Setting Retrospective cohort study conducted at 2 large integrated health plans in California and Washington.

Patients Population-based sample of 20638 health plan members aged 14 years or older who had at least 1 outpatient diagnosis of bipolar disorder and at least 1 filled prescription for lithium, divalproex, or carbamazepine between January 1, 1994, and December 31, 2001. Follow-up for each individual began with first qualifying prescription and ended with death, disenrollment from the health plan, or end of the study period.

Main Outcome Measures Suicide attempt, recorded as a hospital discharge diagnosis or an emergency department diagnosis; suicide death, recorded on death certificate.

Results In both health plans, unadjusted rates were greater during treatment with divalproex than during treatment with lithium for emergency department suicide attempt (31.3 vs 10.8 per 1000 person-years; $P < .001$), suicide attempt resulting in hospitalization (10.5 vs 4.2 per 1000 person-years; $P < .001$), and suicide death (1.7 vs 0.7 per 1000 person-years; $P = .04$). After adjustment for age, sex, health plan, year of diagnosis, comorbid medical and psychiatric conditions, and concomitant use of other psychotropic drugs, risk of suicide death was 2.7 times higher (95% confidence interval [CI], 1.1-6.3; $P = .03$) during treatment with divalproex than during treatment with lithium. Corresponding hazard ratios for nonfatal attempts were 1.7 (95% CI, 1.2-2.3; $P = .002$) for attempts resulting in hospitalization and 1.8 (95% CI, 1.4-2.2; $P < .001$) for attempts diagnosed in the emergency department.

Conclusion Among patients treated for bipolar disorder, risk of suicide attempt and suicide death is lower during treatment with lithium than during treatment with divalproex.

Lithium Treatment and Suicide Risk in Major Affective Disorders: Update and New Findings

Ross J. Baldessarini, M.D.; Leonardo Tondo, M.D.; and John Hennen, Ph.D.

Background: Evidence that therapeutic benefits of psychiatric treatments include reduction of suicide risk is remarkably limited and poorly studied. An exception is growing evidence for such suicidal risk reduction with long-term lithium maintenance. This report updates and extends analyses of lithium treatment and suicides and attempts. **Method:** We pooled data from studies providing data on suicidal acts, patients at risk, and average exposure times with or without lithium maintenance therapy, and considered effects of lithium on selected subgroups. **Results:** Data from 34 reported studies involved 42 groups with lithium maintenance averaging 3.36 years, and 25 groups without lithium followed for 5.88 years, representing 16,221 patients in a total experience of 64,233 person-years. Risks for all suicidal acts/100 person-years averaged 3.10 without lithium versus 0.210 during treatment (93% difference) versus approximately 0.315 for the general population. For attempts, corresponding rates were 4.65 versus 0.312 (93% difference), and for completed suicides, 0.942 versus 0.174 (82% difference). Subjects with bipolar versus various recurrent major affective disorders showed similar benefits (95% vs. 91% sparing of all suicidal acts). Risk reductions for unipolar depressive, bipolar II, and bipolar I cases ranked 100%, 82%, and 67%. Suicide risk without lithium tended to increase from 1970 to 2002, with no loss of effectiveness of lithium treatment. **Conclusion:** The findings indicate major reductions of suicidal risks (attempts > suicides) with lithium maintenance therapy in unipolar ≈ bipolar II ≈ bipolar I disorder, to overall levels close to general population rates. These major benefits in syndromes mainly involving depression encourage evaluation of other treatments aimed at reducing mortality in the depressive and mixed phases of bipolar disorder and in unipolar major depression. *(J Clin Psychiatry 2003;64[suppl 5]:44–52)*

Bio-Psycho-Social Model

- Biological: Psychiatric Disorders
- Psychological: Emotional, Cognitive, Behavioral
- Social: Cultural, Environmental

Psychological Factors

- Hopelessness
- Impulsivity
- Anxiety
- Agitation

Psychotherapy



Regardless of theoretical basis, key element is a positive and sustaining therapeutic relationship

Psychotherapy: DBT

Two-Year Randomized Controlled Trial and Follow-up of Dialectical Behavior Therapy vs Therapy by Experts for Suicidal Behaviors and Borderline Personality Disorder

Marsha M. Linehan, PhD; Katherine Anne Comtois, PhD; Angela M. Murray, MA, MSW; Milton Z. Brown, PhD; Robert J. Gallop, PhD; Heidi L. Heard, PhD; Kathryn E. Korlund, PhD; Darren A. Tutek, MS; Sarah K. Reynolds, PhD; Noam Lindenboim, MS

Context: Dialectical behavior therapy (DBT) is a treatment for suicidal behavior and borderline personality disorder with well-documented efficacy.

Objective: To evaluate the hypothesis that unique aspects of DBT are more efficacious compared with treatment offered by non-behavioral psychotherapy experts.

Design: One-year randomized controlled trial, plus 1 year of posttreatment follow-up.

Setting: University outpatient clinic and community practice.

Participants: One hundred one clinically referred women with recent suicidal and self-injurious behaviors meeting *DSM-IV* criteria, matched to condition on age, suicide attempt history, negative prognostic indication, and number of lifetime intentional self-injuries and psychiatric hospitalizations.

Intervention: One year of DBT or 1 year of community treatment by experts (developed to maximize internal validity by controlling for therapist sex, availability, expertise, allegiance, training and experience, consultation availability, and institutional prestige).

Main Outcome Measures: Trimester assessments of suicidal behaviors, emergency services use, and general psychological functioning. Measures were selected based on previous outcome studies of DBT. Outcome variables were evaluated by blinded assessors.

Results: Dialectical behavior therapy was associated with better outcomes in the intent-to-treat analysis than community treatment by experts in most target areas during the 2-year treatment and follow-up period. Subjects receiving DBT were half as likely to make a suicide attempt (hazard ratio, 2.66; $P = .005$), required less hospitalization for suicide ideation ($F_{1,92} = 7.3$; $P = .004$), and had lower medical risk ($F_{1,50} = 3.2$; $P = .04$) across all suicide attempts and self-injurious acts combined. Subjects receiving DBT were less likely to drop out of treatment (hazard ratio, 3.2; $P < .001$) and had fewer psychiatric hospitalizations ($F_{1,92} = 6.0$; $P = .007$) and psychiatric emergency department visits ($F_{1,92} = 2.9$; $P = .04$).

Conclusions: Our findings replicate those of previous studies of DBT and suggest that the effectiveness of DBT cannot reasonably be attributed to general factors associated with expert psychotherapy. Dialectical behavior therapy appears to be uniquely effective in reducing suicide attempts.

Arch Gen Psychiatry. 2006;63:757-766

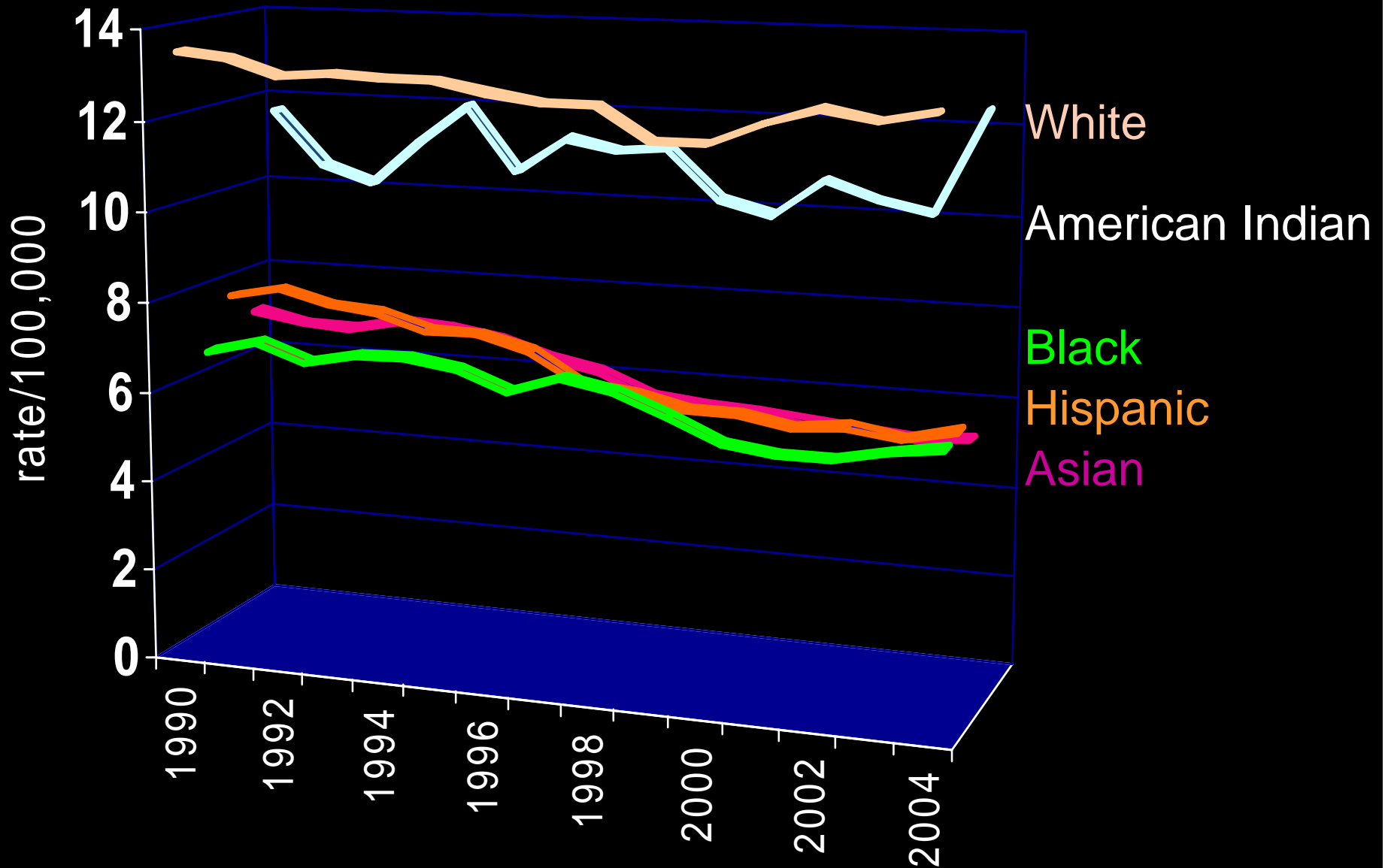
Cultural Competence

- Sensitive to operation of culture in human behavior (emotional issues and suicide)
- Willing to view clinician-patient interaction in a cultural context
- Integrate cultural factors in treatment plan
- Seek cultural consultation when necessary

Culture & Suicide Evaluation

- Inquiry into cultural view of suicide
- Inquiry into individual view (self-sacrifice, social statement, or attempt to end suffering)
- Expectation of patient on clinician
- Avoid assumptions that patient would want what the clinician want

US Suicide Rate (Race/Ethnicity)



Emerging Suicide Patterns

- The suicide rate of African-American adolescents and young adult males has been rising rapidly
- Suicide attempts of Hispanic youths are greater than those of white and African-American youths

Culture & Religion

- African American
 - Religious communities see suicide as unacceptable
 - Women have more social ties and support
- Asian
 - Values interdependence (social support)
 - Some may see suicide as acceptable to rid of debt/shame
- Hispanic
 - Catholics teaches that suicide is a sin
- Native Americans
 - Most have no strong sanction against suicide

Culture: Protective Factors

- Cultural and religious beliefs often discourage suicide and support self-preservation
- Coping (problem solving) through social connections
- Direction, values, dedication
- Social support: family, co-workers, community

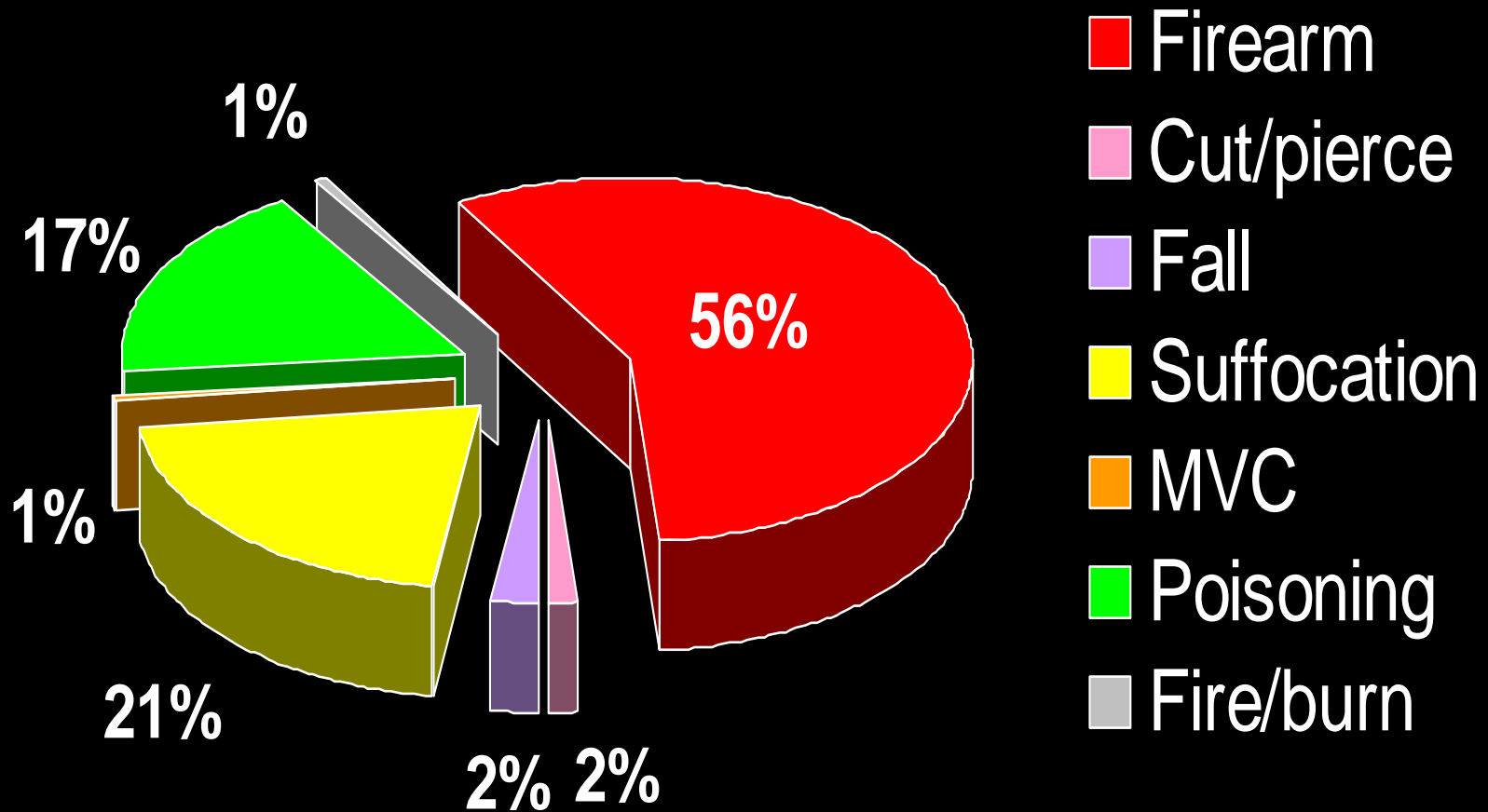
Assimilation & Acculturation

- Alienation from family members (and friends)
- More social isolation
- Often no established relationship with a counselor or clergy
- Less likely too seek professional help

Bio-Psycho-Social Model

- Biological: Psychiatric Disorders
- Psychological: Emotional, Cognitive, Behavioral
- Social: Cultural, Environmental

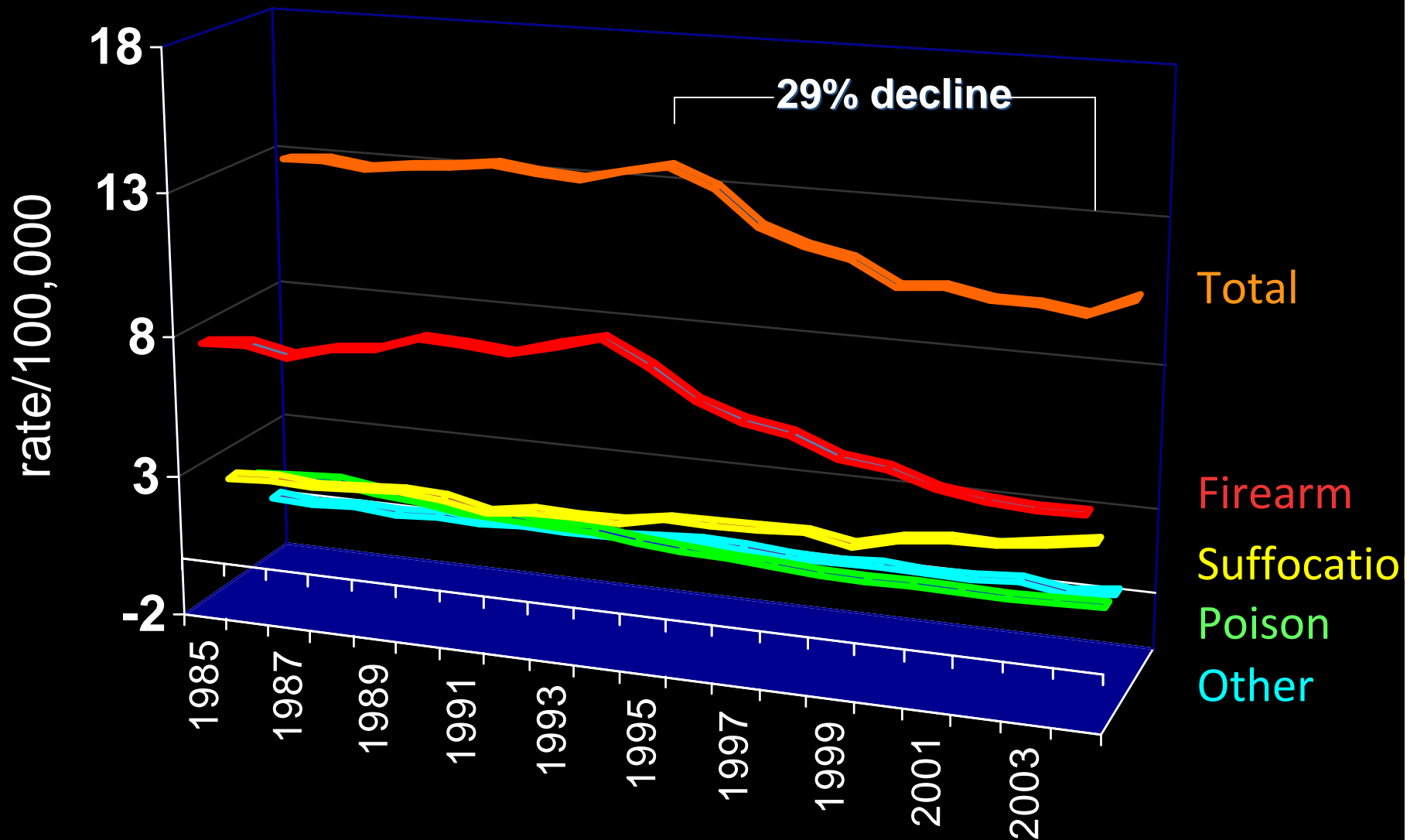
Mechanism of Suicide Deaths



Suicide Statistic

- Guns are twice as likely to be found in the homes of suicide victims (Brent et al 1991)
- Type of gun (handgun, rifle, etc.) was not statistically correlated with increased risk for suicide

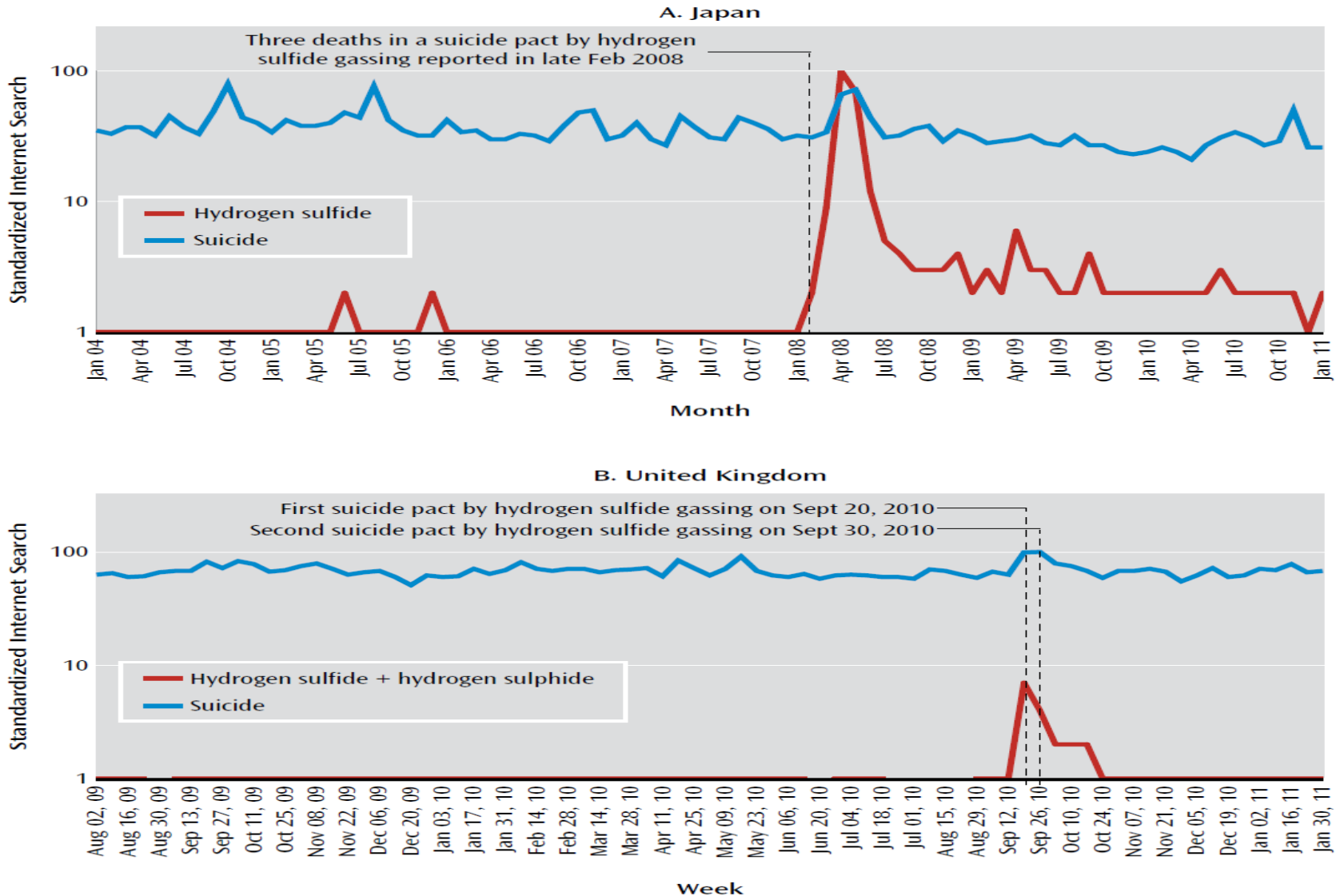
Suicide Rate, 15-24 year-olds



Modified from Catherine Barber
Harvard Injury Control Research Center

Environmental Risk: Media

FIGURE 1. Trends in Internet Searches Using the Terms “Suicide” and “Hydrogen Sulfide” (or “Hydrogen Sulphide”) Google in Japan, January 2004–January 2011, and in the United Kingdom, August 2009–January 2011^a



^a The month or week with the highest number of searches is assigned the value 100, and other months/weeks are scaled accordingly.

Media Guidelines



American Foundation *for* Suicide Prevention

- *American Foundation for Suicide Prevention website: www.afsp.org/media*
- *www.reportingonsuicide.org/*

Reporting on Suicide:

recommendations
for the media

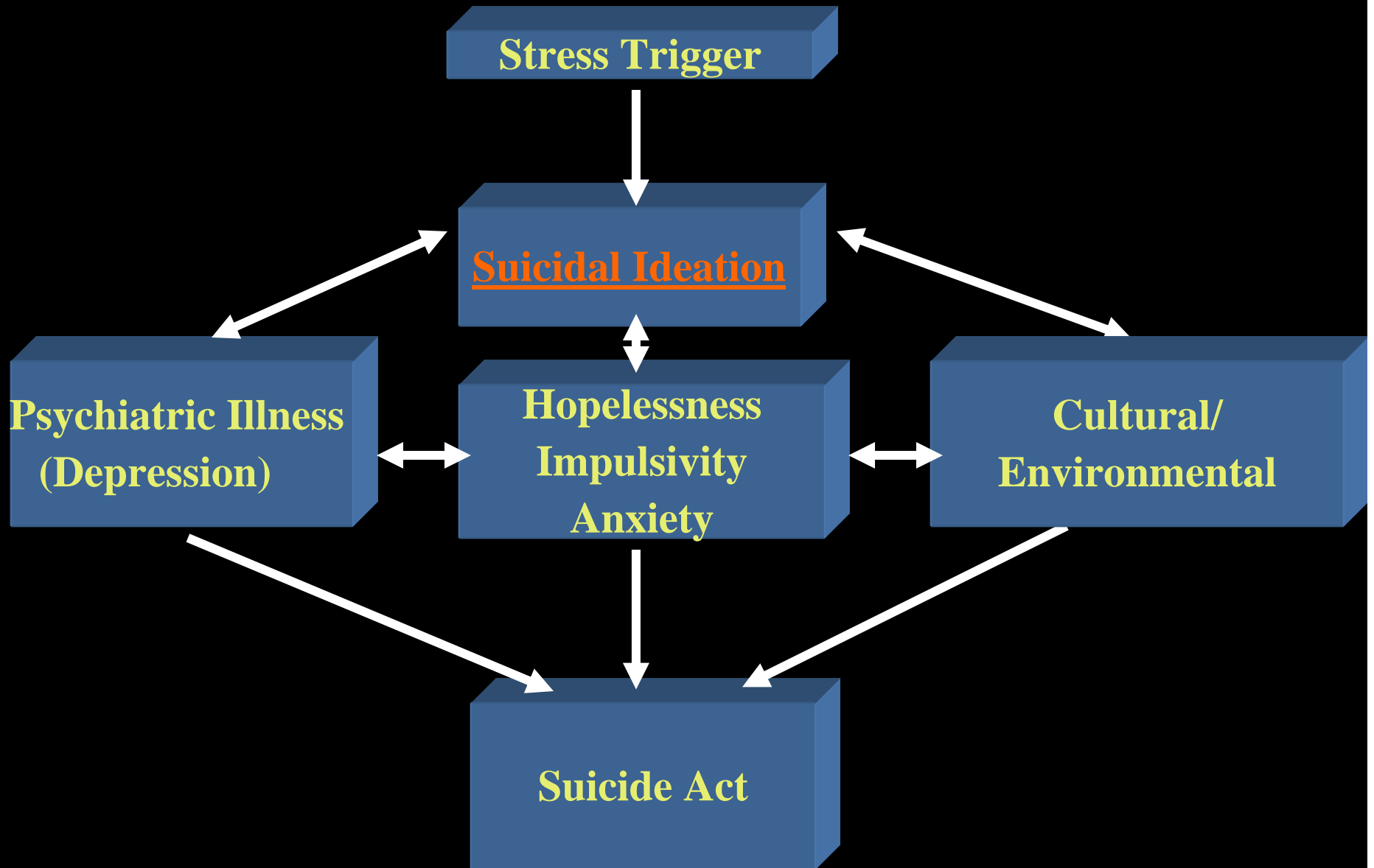


Centers for Disease Control and Prevention
National Institute of Mental Health
Substance Abuse and Mental Health Services Administration
Office of the Surgeon General
American Foundation for Suicide Prevention
American Association of Suicidology
Annenberg Public Policy Center

Suicide Risk Assessment

- It is NOT suicide prediction!
- Systematic consideration of relevant risk factors, present episode of illness, symptoms, and specific suicide plans
- Guides treatment plan

Suicide Risk Assessment



Fact or Fiction



- Asking a depressed person whether they would like to talk about their depression does not increase the risk of them taking their own life.

How to help?

1. Inquire

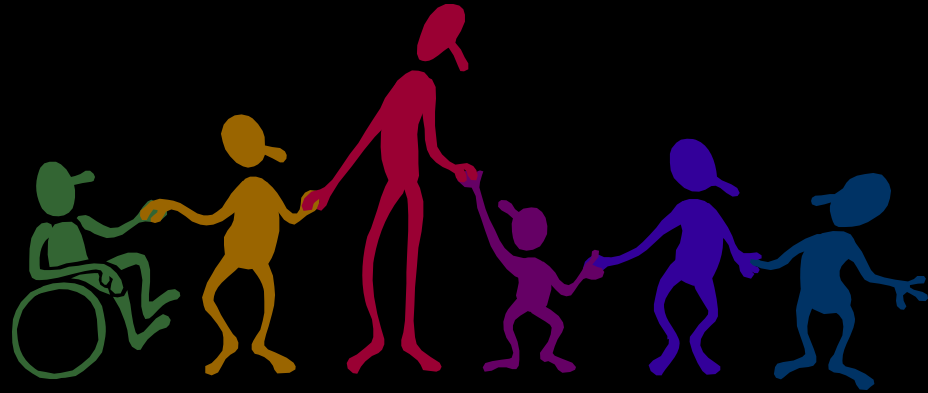
2. Show that you care

3. Get help



What NOT to Say...

- “It’s just a phase”
- “You’ll snap out of it”
- “You’re just trying to get attention”
- “Get over it”



Resources

Suicide Prevention Action Network USA (SPAN USA) www.spanusa.org
National non-profit that works to increase awareness regarding the toll of suicide on our nation and to develop political will to ensure that the government effectively addresses suicide.

American Foundation for Suicide Prevention (AFSP) www.afsp.org
Dedicated to advancing our knowledge of suicide and our ability to prevent it.

The National Suicide Prevention Lifeline (NSPL)
www.suicidepreventionlifeline.org
1-800-273-TALK (8255), 24-hour confidential crisis hotline

American Association of Suicidology (AAS) www.Suicidology.org
National non-profit dedicated to the understanding and prevention of suicide

California Office of Suicide Prevention
<http://www.dmh.ca.gov/PEIStatewideProjects/SuicidePrevention.asp>

Questions

